	Application No.	Applicant(s)
Notice of Allowability	10/517,236	VAZEILLE ET AL.
	Examiner	Art Unit	
	LECHI TRUONG	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the amendment filed on 04/22/2010*.

2. ☒ The allowed claim(s) is/are *1, 3-14, 16-26 now renumbered as claims 1-24*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☒ All   b) ☐ Some*   c) ☐ None   of the:

         1. ☐ Certified copies of the priority documents have been received.

         2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

         3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

     * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

     (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

         1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

     (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

         Paper No./Mail Date _____.

     Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *04/18/2010* .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

/LeChi Truong/
Primary Examiner, Art Unit 2194

Examiner's Amendment

1.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided by

37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no

lather than the payment of the issue fee.

2.   Authorization for this examiner's amendment was given in a telephone interview

with Mr. Charles L. Gagnebin (Registration N0. 25,467) on 04/18/2010.

3.   Amend the following claims:

1. (Previously Presented) A method of managing events in a standard computer

system comprising a central unit connected to memory units and peripheral devices by a

data bus allowing a multimaster configuration, the method comprising the following

steps:

- receiving one or more events, time-stamping each received event,

- storing each received event in a first memory and a second memory,

- assigning at least one appropriate action to each received event, and

- executing that action in response to the received event,

which method is characterized in that the above-mentioned management steps are

carried out in real time without access to the central unit by a management unit included

in an independent management module connected to the data bus and incorporated into

the standard computer system, and the first memory and the second memory are

associated with the management unit, the first memory storing events to be processed by

the independent management module and the second memory storing events so that these

events may be read via the data bus;

wherein events received by the management unit which come from outside the

management module are resynchronized to a frequency corresponding to that of a clock

internal to the computer system while events received from within the management

module are received synchronized.

2. (Canceled)

3. (Currently Amended) [[A]] The management method according to claim 1,

characterized in that [[the]] a timescale of real-time management is of [[the]] an order of

one microsecond.

4. (Currently Amended) [[A]] The management method according to claim 1,

characterized in that the independent management module is isolated from the central

unit by a bridge.

5. (Currently Amended) [[A]] The management method according to claim 1,

characterized in that said action is read in a table of actions associated with the

management unit and is preprogrammed via the data bus.

6. (Currently Amended) [[A]] The management method according to claim 1,

characterized in that events received by the management unit are time-stamped to an

accuracy of [[the]] an order of 100 nanoseconds and stored in the second memory

associated with the management unit so that these events may be read via the data bus in

order to store and monitor these events.

7. (Currently Amended) [[A]] The management method according to claim 1,

characterized in that events received by the management unit are generated by a clock

register internal to the management module.

8. (Currently Amended) [[A]] The management method according to claim 1,

characterized in that events received by the management unit come from a unit adjacent

the management module.

9. (Currently Amended) [[A]] The management method according to claim 1,

characterized in that events received by the management unit come from an equipment

external to the computer system.

10. (Currently Amended) [[A]] The management method according to claim 8,

characterized in that events received by the management unit are synchronized to a

frequency corresponding to that of a clock internal to the computer system.

11. (Currently Amended) [[A]] The management method according to claim 1,

characterized in that events received from the external equipment are filtered to eliminate

interference.

12. (Currently Amended) [[A]] The management method according to claim 1,

characterized in that the management unit generates an interrupt if it is not possible to

associate an event with an action.

13. (Previously Presented) Event management module incorporated into a standard

computer system comprising a central unit connected to memory units and peripheral

devices by a data bus allowing a multimaster configuration, which module is

characterized in that it comprises:

- an independent management unit connected to the central unit via an interface and the

data bus, said management unit being adapted to receive and process events in real time

without intervention by the central unit,

- a time-stamping clock adapted to time-stamp these events,

- a first memory associated with the management unit for storing events to be processed

by the event management module,

- a second memory associated with the management unit for storing the events in order to

read them via the data bus; and

- a random-access memory containing a preprogrammed table of actions, associated with

the management unit and adapted to assign appropriate actions to events received

thereby;

    wherein events received by the management unit which come from outside the

management module are resynchronized to a frequency corresponding to that of a clock

internal to the computer system while events received from within the management

module are received synchronized.

14. (Currently Amended) [[A]] The event management module according to claim 13,

characterized in that the data bus is a standard bus selected from the group comprising a

PCI bus, a VME bus, a compact PCI bus and a USB bus.

15. (Canceled)

16. (Currently Amended) [[A]] The event management module according to claim 13,

characterized in that the first memory and the second memory are of [[the]] a FIFO type.

17. (Currently Amended) [[A]] The event management module according to claim 13,

characterized in that the random-access memory containing the table of actions is a

double-port RAM.

18. (Currently Amended) [[A]] The management method according to claim [[2]] 1,

characterized in that:

      [[the]] a timescale of real-time management is of [[the]] an order of one

microsecond;

the independent management module is isolated from the central unit by a bridge;

said action is read in a table of actions associated with the management unit and is

preprogrammed via the data bus; events received by the management unit are time-

stamped to an accuracy of [[the]] an order of 100 nanoseconds and stored in the second

memory associated with the management unit so that these events may be read via the

data bus in order to store and monitor these events.

19. (Currently Amended) [[A]] The management method according to claim 18,

characterized in that events received by the management unit are generated by a clock

register internal to the management module.

20. (Currently Amended) [[A]] The management method according to claim 18,

characterized in that events received by the management unit come from a unit adjacent

the management module.

21. (Currently Amended) [[A]] The management method according to claim 18,

characterized in that events received by the management unit come from an equipment

external to the computer system.

22. (Currently Amended) [[A]] The management method according to claim 20,

characterized in that events received by the management unit are synchronized to a

frequency corresponding to that of a clock internal to the computer system.

23. (Currently Amended) [[A]] The management method according to claim 21,

characterized in that events received by the management unit are synchronized to a

frequency corresponding to that of a clock internal to the computer system.

24. (Currently Amended) [[A]] The management method according to claim 21,

characterized in that:

events received from the external equipment are filtered to eliminate interference;

the management unit generates an interrupt if it is not possible to associate an event with

an action.

25. (Currently Amended) [[A]] The event management module according to claim 14,

characterized in that:

the first memory and the second memory are of [[the]] a FIFO type.

26. (Currently Amended) [[A]] The event management module according to claim 13,

characterized in that:

the first memory and the second memory are internal to the management unit.

A.   The following is an examiner's statement of reasons for allowance:

As to claims 1, 13, the prior art as taught by Suzuki et al. (U. S. patent

application publication no. 2003/0046324) in view of Jamadagni et al. (U. S. patent

application publication no 20020152185),   in view of Henning (US 4538235 A) and

Nakamura (US 5748967 A) do not teach on render obvious the limitations recited in

claims 1, 13 when taken in the context of the claims as a whole,

1.   which method is characterized in that the above-mentioned management

steps are carried out in real time without access to the central unit by a management unit

included in an independent management module connected to the data bus and

incorporated into the standard computer system, and the first memory and the second memory are associated with the management unit, the first memory storing events to be processed by the independent management module and the second memory storing events so that these events may be read via the data bus; wherein events received by the management unit which come from outside the management module are resynchronized to a frequency corresponding to that of a clock internal to the computer system while events received from within the management module are received synchronized as recited in the independent claim 1 .

      2.   a first memory associated with the management unit for storing events to be processed by the event management module, a second memory associated with the management unit for storing the events in order to read them via the data bus; and a random-access memory containing a preprogrammed table of actions, associated with the management unit and adapted to assign appropriate actions to events received thereby;

      wherein events received by the management unit which come from outside the management module are resynchronized to a frequency corresponding to that of a clock internal to the computer system while events received from within the management module are received synchronized as recited in the independent claim 13. Moreover, evidence for modifying the prior art teachings by one of ordinary skill level in the art was not uncovered so as to result in the invention as recited in claims 1, 13.

B.   Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272-3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sough Hyung can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR of Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

/LeChi Truong/

Primary Examiner, Art Unit 2194